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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,513	10/12/2001	David S. Allison	0007056-0198/P5941	3871
32615	7590	09/23/2004	EXAMINER	
OSHA & MAY L.L.P./SUN 1221 MCKINNEY, SUITE 2800 HOUSTON, TX 77010			VU, TUAN A	
			ART UNIT	PAPER NUMBER
			2124	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,513

Applicant(s)

ALLISON, DAVID S.

Examiner

Tuan A Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the application filed October 12, 2001.

The drawings filed 02/06/2002 are also admitted. Claims 1-30 have been submitted for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 11-15, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by University of Oregon, "TAU Portable Profiling Package", <http://www.acl.lanl.gov/tau>, copyright 1997 (hereinafter OregonU, pp. 1-4); and admitted prior art by (hereinafter APA – see instant specifications: BACKGROUND ART).

As per claim 1, OregonU and APA (*sizeof* - pg. 2, bottom para) disclose a method for determining size value associated with an object at runtime comprising:

executing a computer program; associating a size value with an object during execution of said program; and

retrieving said size value when a size operator is executed (Note: the Examiner will interpret this 'is executed' limitation as if the instruction underlying the resolved operator is being executed or the instruction operating on what represents such operator at runtime is executed for yielding a runtime result) for said object during execution of said program (see APA; see OregonU: e.g. *int func_tmpl (Tx) ... return sizeof(x)* , pg. 2 – Note: a size associated

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with *x* is being retrieved at runtime when the instruction underlying the source symbol operator *sizeof* is being executed).

As per claims 2 and 3, official notice is taken in programming language using *sizeof* as operator (C/C++), the arguments such as a string or vector or array being passed to such operator are known concepts in computer programming languages. Hence, these limitations are implicitly disclosed by APA or OregonU.

As per claim 4, OregonU discloses a value being determined by a function of an object being an instance of a class (OregonU: e.g. *int func_tmpl (T x) ... return sizeof(x)*, pg. 2)

As per claim 5, OregonU discloses providing an instance of size operator for said class and calling said instance of said size operator (see *class T* and *sizeof(x)* from OregonU pg. 2 – re claim 4).

As per claim 11, OregonU and APA (*sizeof* - pg. 2, bottom para) disclose a runtime size information determiner comprising:

an associating unit configured to associate a size value with an object during execution of a computer program; and

a retrieval unit configured to retrieving said size value when a size operator is executed for said object during execution of said program(see APA; see OregonU: e.g. *int func_tmpl (T x) ... return sizeof(x)* , pg. 2 – Note: a size associated with *x* is being retrieved at runtime when the instruction underlying the source symbol operator *sizeof* is being executed).

As per claims 12-15, these claims correspond to claims 2-5, respectively; hence are rejected with the corresponding rejections set forth therein.

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As per claim 21, this is a computer program product with readable medium to embody a program code for performing the same step limitations recited in claim 1; hence is rejected with the corresponding rejection as set forth therein.

As per claims 22-25, these claims correspond to claims 2-5, respectively; hence are rejected with the corresponding rejections set forth therein.

4. Claims 6-10, 16-20, and 26-30 rejected under 35 U.S.C. 102(b) as being anticipated by Bruce Eckel, "Thinking in C++ 2nd edition, Volume 2: Standard Libraries & Advanced Topics", 1999, chp. 17, pp. 399-422; url = "citeseer.ist.psu.edu/385233.html" (hereinafter Eckel); and admitted prior art by (alias APA – see instant specifications: BACKGROUND ART).

As per claim 6, APA (*typeof* - pg. 2, bottom para) and Eckel disclose a method for determining type value associated with an object at runtime comprising:

executing a computer program; associating a type value with an object during execution of said program (e.g. *RTTI* - Eckel: pg. 400-404); and

retrieving said type value when a type operator is executed (Note: the Examiner will interpret this 'is executed' limitation as if the instruction underlying the resolved operator is being executed or the instruction operating on what represents such operator at runtime is executed for yielding a runtime result) for said object during execution of said program(see APA; see Eckel: *typeid* () - pp 404-408).

As per claims 7 and 8, official notice is taken in programming language using *typeof* as operator (C/C++ as in APA), the arguments such as a string or an array being passed to such operator are known concepts in computer programming languages. Besides, Eckel discloses type evaluation by getting type information in a structure (e.g. Eckel: pp. 404-410 – Note: a *typeinfo*

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structure implicitly discloses the object type being retrieved to be either a string or an address – a number- representing such type information structure reference). Hence, these limitations are implicitly disclosed by APA or Eckel.

As per claim 9, based on the object-oriented programming as disclosed by Eckel, the use of one instance of *typeid()* and a method within a class instance is disclosed (re claim 6).

As per claim 10, Eckel discloses providing an instance of type operator for said class and calling said instance of said type operator (see Eckel – re claim 9).

As per claim 16, APA (*typeof* - pg. 2, bottom para) and Eckel disclose a runtime type information determiner comprising:

an associating unit configured to associate a type value with an object during execution of a computer program (e.g. *RTTI* - Eckel: pg. 400-404); and

a retrieval unit configured to retrieving said type value when a type operator is executed for said object during execution of said program(see APA; see Eckel: *typeid ()* - pp 404-408).

As per claims 17-20, these claims correspond to claims 7-10, respectively; hence are rejected with the corresponding rejections set forth therein.

As per claim 26, this is a computer program product with readable medium to embody a program code for performing the same step limitations recited in claim 6; hence is rejected with the corresponding rejection as set forth therein.

As per claims 27-30, these claims correspond to claims 7-10, respectively; hence are rejected with the corresponding rejections set forth therein.

Conclusion

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (703)305-7207. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)


or: (703) 746-8734 (for informal or draft communications, please label

"PROPOSED" or "DRAFT" – please consult Examiner before use)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. , 22202. 4th Floor(Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

VAT
September 20, 2004


KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER